

Saint Louis Audubon

Bulletin

Vol 39 No. 2

Fall 1972

COMING

ST. LOUIS AUDUBON SOCIETY'S SPRING 1973 NATURE PHOTOGRAPHY WORKSHOPS AND NATURE PHOTOGRAPHY CONTEST

Tentative dates and locations for the Spring 1973 Nature Photography Workshops:

Tuesday evening, April 24, 1973, indoor session at Headquarters Auditorium, St. Louis County Library, 1640 S. Lindbergh Blvd.

Saturday, all day in the field session, April 28, 1973, Pere Marquette State Park, Grafton, Illinois, closing with dinner at the park Inn.

Tuesday evening, May 1, 1973, indoor session at Headquarters Auditorium, St. Louis County Library, 1640 S. Lindbergh Blvd.

Saturday, all day in the field session, May 5, 1973, at the Pickering's Sunny Ranch, near Wright City, Missouri, closing with dinner at a nearby roadside restaurant(not yet selected).

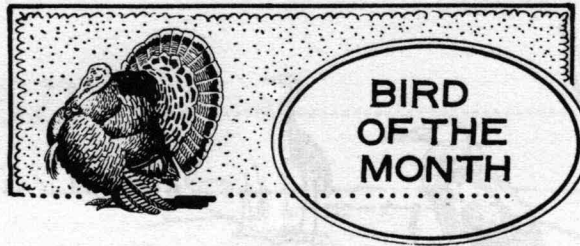
NATURE PHOTOGRAPHY CONTEST

A Nature Photography Contest open to participants of any St. Louis Audubon Society Nature Photography Workshop(September-October, 1970; May, 1972; or the planned April-May, 1973) are eligible. Contest details will be published later.

20 to 24 Display Award winners will be selected by an eminently qualified panel of judges. The Society will have an 11 inch by 14 inch mounted print made of each winning entry. These prints will become a traveling exhibit to be displayed in and around St. Louis and the Metropolitan Area by the St. Louis Audubon Society. When the exhibit finally closes the winning contestants will be given their prints, duly certified as Display Award winners by the St. Louis Audubon Society.

More on all this later. But do reserve the above dates for St. Louis' only in-the-field Nature Photography Workshops. The six teams of instructors represent winners of local, national and international photography awards; are writer-photographers with local, national and international publications; and are lecturers, using their own slides to illustrate their presentations. Your workshops instructors will be Paul and Frances Bauer, George and Millie Blaha, Tom and Cynthia Brooks, Jim and Charlene Jackson, Walter and Vivian Liddell, and Ed and Lee Mason.

YOUR BULLETIN IS PRINTED ON 100% RECLAIMED WASTE PAPER



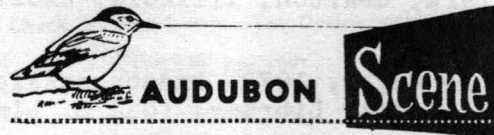
WELCOME BACK

By now we've all survived summer vacations, the opening of school, Halloween and a political campaign. It's to be hoped that we all had a chance over the summer to revive our spirits with some form of communication with nature. In any case, you will find several articles by those who did. You also will find invitations to participate in various coming activities.

In keeping with our policy of opening our pages to those who have something to say in the field of conservation, there are several items from non-Audubon sources. As always, when we print these items, Board endorsement is not necessarily implied. However, in the case of The Nature Conservancy, whose brochure is folded into this issue, we do heartily endorse their objectives. The Audubon Society and The Nature Conservancy have a long history of cooperation on both the local and national level. To paraphrase their statement "(it) is the organization (concerned with) saving our vanishing natural areas.....(Its) total resources are massed for this one objective."

We are also very grateful to the Missouri Botanical Garden Bulletin for the use of Marjorie Richardson's article and her lovely illustrations.

And finally, from now on you will be subjected occasionally to a series of outrageous puns by our eminent bird reporter, Earl Comfort. They are far too lethal to be taken in large doses but we think you'll survive the spoonfuls we'll dole out from time to time.

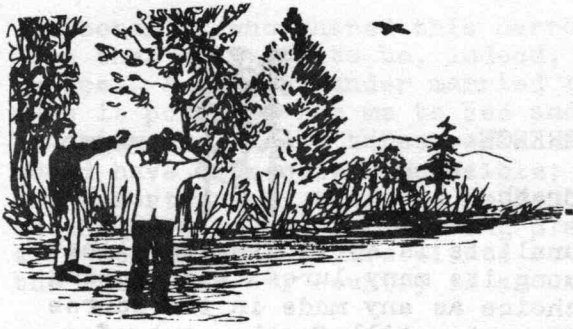


The fall St. Louis Audubon picnic at the Pickering Sunny Ranch was thoroughly enjoyed by nearly 90 members on October 1st. The weather was perfect and so was the friendly Pickering hospitality. Many members explored along the numerous trails, browsed in the museum, or just plain relaxed in the shade. In the afternoon the Nature Workshop groups provided an opportunity for many people to become acquainted with an unfamiliar subject or to learn more concerning their favorite form of nature study.

Burrell and Ruby Pickering have assured us that we are welcome to come again next Spring. The special events committee will try to select a date when the many wildflowers and birds will provide the best enjoyment. We thank the Pickering's for the special privilege of sharing their large private wildlife refuge with us and we appreciate the considerable effort and preparation that they provided for our Society.

WILDLIFE FILMS AT ETHICAL SOCIETY

The first two wildlife films to be shown at the Ethical Society have been seen by large and enthusiastic audiences. The Board is pleased that the change of location has met with such a positive response, and very grateful to Gary Giessow and his committee for their work in making these arrangements. Come and join us at the Ethical Society, 9001 Clayton Road on December 8th for the next film by Earl Hilfiker, "Beavers, Water, and Wildlife."



AUDUBON SUMMER CAMP PROGRAM

Edward P. Ortleb
Chairman, Scholarship Committee

Our St. Louis chapter has for many years provided scholarships for attendance at the various summer camps administered by the National Audubon Society. The camp programs develop an appreciation of our wildlife heritage and a concern for the quality of the environment. Field trips, demonstrations and seminars add to the participant's knowledge and understanding of the natural world.

Eight teachers from the St. Louis area were sent to the summer camps this past year. The information and techniques they learned at the camps will be used in their classrooms and field trips with young people.

Following are some typical comments from some of this year's scholarship recipients.

Mr. Robert Brandewiede: "The camp was a fantastic experience of living a philosophy of learning by doing. The instructors not only made everyone feel welcome, but also helped develop a group identity which drew everyone close together."

Miss Barbara Krehbiel: "I never before learned so much in two weeks as I did in the two weeks I spent at Audubon Camp. The program was well rounded with the emphasis upon how an organism fits into its environment. I most highly recommend the experience particularly to anyone who works with children in the out-of-doors, but also to anyone who has an interest in nature study."

Mrs. Clara B. Kierstead: "Attending my session at Wind River Audubon Camp was both a peak educational and emotional experience. The professional ecological staff plus many equally trained people as "students" made each day and evening an enjoyable learning experience to be used later in many fields of work. The balance between young people, middle-aged and oldsters kept us all on our toes. The inspirational closing session on the mountain side over-looking Wind River Valley moved the entire group and gave deep meaning to the full program."

We feel we had an outstanding group of participants this year and our sentiments were echoed by the camp directors who wrote to us indicating their appreciation for providing scholarships and sending such fine candidates. Mr. Robert K. Turner, Director of the Camp of the West, said, "All the staff thoroughly enjoyed meeting and working with your recipients."



CHRISTMAS BIRD COUNTS

The St. Louis Audubon Orchard Farms - St. Charles County Christmas Count will be held Saturday, December 30, 1972. Meet at 8:00 A.M. at old Boschertown Schoolhouse at junction of Highways 94 and B. Bring Lunch. Prior registration not required. For further information call Earl Hath, 965-8642 or contact Chairman Earl Comfort, 630 West Essex, Kirkwood, Mo., 63122.

The Webster Groves Nature Study Society Christmas Count at Busch Wildlife Area will be held Sunday, December 17th. Meet at 8:00 A.M. at Headquarters Parking Lot. Hot lunches will be available at the restaurant located on the Refuge. Prior registration not required. For further information call Jim Comfort, 962-8373.



BOTANIZING IN GREECE

Erna R. Eisendrath



As it was for T.S. Eliot, so too for naturalists is April "the cruellest month", forcing on the latter a choice among its many lures. Last spring I opted for botany in Greece, as good a choice as any made in the course of numerous Aprils; and, to pull the Eliot quote still further out of context, the experience was a stimulating mix of "memory and desire, stirring dull roots."

One's memory of Acanthus leaves, topping ancient Corinthian columns stirred desire to see living Acanthus plants; no problem. Acanthus species, with their very large, deeply cut, flexible dark green leaves grow wild in much of the Mediterranean area. (I did not, however, see their showy flower spikes, as these only begin to appear in May.) Again, the very dull roots of mythology read in school were mightily stirred by seeing plants named from the myths growing in the wild: Iris, Narcissus, Hyacinth, etc.

Other shallower, because more recent, roots were also stirred; one, indeed demanded literally to be unearthed. This was the forked, anthropomorphic true root of the mandrake plant, long valued for its medicinal properties (It is thought to have been used as one of the earliest anaesthetics.) and as a potent ingredient of love philters. Although the visible rosette of large coarse leaves is far from attractive, and although I saw neither flower nor fruit, I couldn't have been more excited to come upon the rarest Orchid than I was to find Mandragora officinalis growing as a weed in an untilled field.

The cluster of superstitions from a wide variety of sources that surrounds the Mandrake is irresistibly fascinating. The plant has a role in the Bible, as well as in Egyptian, Assyrian and Persian lore: both Greek and Roman authors often refer to it, and its fame survived throughout the Middle Ages, during which the legends attached to the plant actually proliferated!

Much of such material concerns the difficulties and dangers of unearthing the Mandrake's root. Theophrastus, writing in Greece around 300 B.C., thought this a relatively simple process; provided that one took care first to draw three circles around the plant with a sword, and pulled it up while dancing about and saying "as many things as possible about the mysteries of love." In the course of ensuing centuries these precautions proved inadequate: it was found that, despite them, as the man-shaped root emerged from the earth its ungodly shrieks often caused the death of the collector or, if he managed to survive, reduced him to lunacy.

But the Mandrake's reputation for mystical power drove men on to finding a way to avoid both death and madness, while bringing the root into their service. By the Middle Ages it had been discovered that if one starved a large dog for a few days, tied it to a Mandrake plant, and then threw a nice juicy bone out of reach of the tether, the dog's lunge for food would unearth the plant, while the collector remained safely out of earshot!

Both the botanist who accompanied our Natural History Tour and I were well aware of all this when we rashly set about the task of digging out the Mandrake root for me to bring home: but alas, our single tool - an asparagus cutter - was totally inadequate; our bird-watcher friends far too impatient-----our efforts were foiled and, as far as I know, there is still no Mandrake root in the St. Louis area. We weren't able even to dig deep enough to evoke a shriek from the plant; but, for the sake of posterity, I feel bound to report that we DID hear a gun shot as we drove the asparagus cutter into the earth. Perhaps this 20th century addendum will some day be found fringing the tapestry of ancient legend so tightly woven about the Mandrake plant!

The botanist who shared this harrowing experience with me proved to be more than valiant; to be, indeed, widely and well versed in the flora of Greece. A New Zealander married to a Greek doctor, Pauline Haritonidou made it possible for me to see and identify some 300 species of plants blooming during the three weeks we were together. Without her help this would have been quite impossible; not only is the Greek flora enormous, but unfortunately there is no handy guidebook available as introduction to the 6000 sorts of flowering plants native to the region. This is about a fourth as many native plants as we have in the United States, despite the fact that our country is about 60 times as big as Greece!

Although these statistics may well have been compiled before Alaska and the Hawaiian Islands became states, they still serve to emphasize the immensity of the Greek flora. This is explained in two ways: first, geographically that country is strategically placed close enough to both Europe and Asia to have acquired, as natives, plants closely related to the quite different floras of both continents; second, Greece and its islands present, for their size, incredibly varied environments in which plants can grow. The mountains are steep and high, offering habitats for plants very like those of the Alps, while the lowlands, especially in the south, produce plants similar to those of other typically Mediterranean floras.

With such topographic variety go climatic extremes, one of which we experienced last April. Taking off one hot and sunny morning from lovely Delphi, in quest of a blooming Christmas Rose, we ventured up a steep slope of Mt. Parnassus; there we found not only the Helleborus cyclophyllus flowering, as we had hoped, but also a rather violent snow storm. This turned out to have some interesting side-lights! First of all we learned that many slopes of that mountain so long associated with the Muses are still so rugged and unmarked that strangers are allowed to visit them only in the company of native guides; secondly I learned a good botanical reason for having always felt that one aspect of Greece not particularly attractive to me was the native resinated wine. Our guide had proudly brought along a large goat-skin flask of home-made "retsina", which at first I politely refused; but toward the end of a long and bitterly cold day this was no longer possible. As I struggled to swallow the stuff, Mrs. Haritonides informed me that the vintage resin of Greece comes from the Aleppo pine, a relative, as are all members of the genus Pinus, of the trees of our southeastern states which are the source of turpentine. I was warmed by the guide's highly resinated wine, but at a price. Q.E.D.

Closely related to the factors of geography and topography of mainland Greece and its islands is the high degree of what biologists call "endemism", a word used to describe plants or animals found living in the wild only in rather limited areas. This is true of about 10% of the plants of Greece, and travelling with someone sufficiently knowledgeable to recognize them enriches the experience enormously. I was thrilled to see the lovely bellflower, Campanula hagiella, growing from limestone rock, as I rode a donkey to the top of Lindos, on the island of Rhodes. This particular species is found growing only on that island, as other plant species are found growing as endemics on other islands, or on mountain tops. High percentages of endemism are characteristic of such areas as these where, due to isolation of populations over long periods of time, new species have opportunity to evolve.

Although there are several specialized floral zones in Greece, perhaps the most interesting to an American visitor is the "Maquis-Garigue." This is a rock and sand area where individual plants are small and sparse, but in which there is a wide variety of species. Many are familiar to us as culinary herbs or garden plants. Among the herbs are :thyme, sage, savory, lavender, garlic, etc. The garden plants are usually tuberous or bulbous: tulips, crocuses, irises, fritillarias, and the Ornithogalum (Star-of-Bethlehem.) To my untutored surprise this area is also the home of a great many species of Orchid. It is certainly true, as the authors of Flowers of the Mediterranean (Oleg Polunin and Anthony Huxley) say, that "it is largely plants of the garigue which give so much colour to the ... spring landscape;" and it is therefore difficult for a conservationist to admit an-

other truth: that we have this sort of vegetation only because man long ago destroyed the forests that once covered most of what is now Greece.

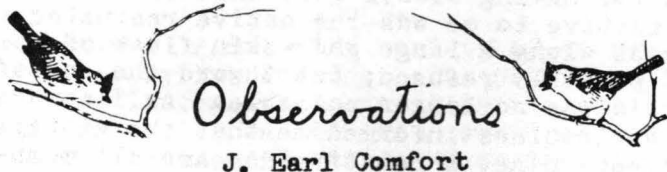
The disastrous side of this destruction was already familiar to Plato, whose Critias described it as follows:

The rocky plain was once covered with rich soil and the mountains were covered by thick woods the soil benefited from an annual rainfall which did not run to waste off the bare earth as it does today you are left with something rather like the skeleton of a body wasted by disease; the rich, soft soil has all run away, leaving the land nothing but skin and bone.

Almost nothing can live on such sick soil except the goat, the introduction of which seems to have sealed for all time the sad fate of the land. That delightful popularizer of natural history, May Theilgaard Watts, has expressed this succinctly in a new book, Reading the Landscape of Europe. The animals, she says,

moved so gently that no one noticed the seedling off at the ground or the sapling that the goats girdled; nor did anyone stop to listen to the louder splash of rain on the stripped forest floor or to observe the muddy runoff It has taken eight thousand years for the Mediterranean, known as the "Cradle of Civilization," to become practically stripped. America is showing signs of becoming civilized, too.

What a strange coincidence that T.S. Eliot's poem, from which I culled analogies in my opening paragraph, is entitled Wasteland.



An area bird report usually deals with the birds encountered and stresses the rare species that are listed. This report is different in part because of the expected ones that WEREN'T found. Perhaps no local birder can recall a fall season that gave us such a poor shorebird migration as 1972 furnished.

The scarcity of shorebirds was partly the result of a lack of suitable mud flats in appreciable numbers. Even the apparently good flats failed to attract them in desired numbers and in hoped-for numbers of species. Rare fall shorebirds simply didn't show up. It's a sad birding affair when the rarest fall species to date (October 12) was a piping plover. Possibly the existing mud flats weren't producing proper shorebird menus.

But some good fall migrations of other bird families made up in part for the lamentably stingy shorebird concentrations. In Illinois cattle egrets were sometimes listed in the hundreds. Best hawks were an extremely rare Swainson's hawk at the Shaw's Garden Arboretum in Franklin County on a St. Louis Audubon hike, and a pigeon hawk at the August A. Busch Wildlife Refuge in St. Charles County.

Several good warbler "waves" got our attention. Best species were a male black-throated blue warbler at Creve Coeur Lake on September 30th seen by Dave Jones, a Swainson's warbler at Busch Wildlife by Jerry and Nancy Strickling, and a Connecticut warbler at Busch Wildlife by George and Terry Barker.

The "bird of the day" for the WGNSS group on the 28th of September was a male vermilion flycatcher at Busch Wildlife. Red crossbills were at the Arboretum in numbers in September and October.



BIRDING IN THE
MISSOURI BOTANICAL GARDEN

Marjorie Richardson

Reprinted from

Missouri Botanical Garden Bulletin,

March-April, 1972

One of the greatest companions to have with you on a walk through the Missouri Botanical Garden is a pair of binoculars. Birding in the Garden is generally good at any season and always interesting. Mr. George F. Tatum, writing in the Bulletin for May, 1916, stated: "After many years' observation of the birds in and around St. Louis, I feel warranted in asserting that the most favored locality is the Missouri Botanical Garden where, during a morning or afternoon walk of not exceeding an hour, in the spring or early summer, one may see or hear from twenty-five to forty species, and usually under such conditions that identification is not difficult."

While the "most favored locality" status might be questioned in 1972, Mr. Tatum could still surely find his twenty-five to forty species on a spring walk, as the northern migrating species use the Garden's fine trees and thickets as stopovers to their nesting grounds. So spring is the finest birding season and a morning walk in the garden should be productive and exciting. In the fall the same species usually return, making that season good birding, too, but more challenging as fall birds are harder to identify. The challenge only adds to the enjoyment!

Not all of the spring arrivals leave the Garden, so summer birding might consist of looking for bird families. Cardinals, robins, song sparrows, house wrens, brown thrashers, mockingbirds, catbirds, yellow warblers, chickadees, downy woodpeckers, yellow-shafted flickers, titmice, bob-whites—these are a few that you will be more likely to see but there will be many others. It takes a sharp and patient eye to find any bird in lush summer foliage.

Two birds that formerly were seen quite commonly in the Garden are the bluebird and the European tree sparrow, that import so unique to the St. Louis area. Henry Shaw, writing about the bluebird about 1880, said, "The earliest harbinger of Spring, seen the first five days of March, a welcome visitor, and a destroyer of insects injurious to Gardens and Orchards." Mr. Shaw seemed quite sure of the date of this lovely Missouri state bird's arrival, but almost one hundred years later we cannot be sure of its arrival at all. It has been seen occasionally in the Garden in the last few years, but is most uncommon.

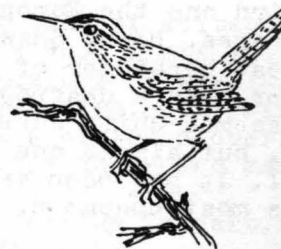
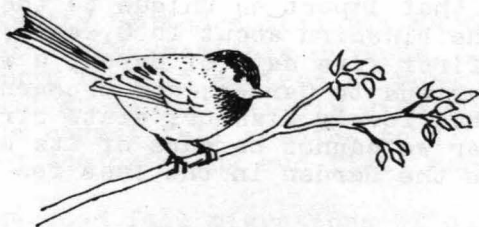
The European tree sparrow used to nest here but like the bluebird, has been pushed out and about by its pugnacious and stronger cousin, the too common house sparrow. Summer and year-round birding should include careful observation of all sparrow flocks, because one or more just might be the somewhat smaller and prettier European tree sparrow. Watch for the green or blue parakeet escapees often seen with the sparrows, too.

Winter birding in the Garden should be done with the ears as well as the eyes, as sounds seem especially loud and distinct in cool weather. Listen for the clear ringing songs of the Carolina wren and mockingbirds; the busy flurry created by Carolina chickadees, titmice, downy woodpeckers, and nuthatches as they eat their way from tree to tree; the sweet sounds of white-throated sparrows, tree sparrows and purple finches; the nasal

"tchap" of song sparrows and the metallic click of the slate-colored junco; the covey calls of the bob-white; the raucous warnings of blue jays as you approach their areas; the twitterings of goldfinches; the scratchings of fox sparrows; the sweet calls of cardinals; the distinctive rappings and calls of each variety of woodpecker; the gurgle of the red-winged blackbirds; and the varied "chucks" and "caws" of the grackles, crows and starlings. There are many others that birders hope to find on winter walks: pine siskins, red polls, field sparrows, towhees, white-crowned sparrows, red-breasted nuthatches, screech owls, great horned owls, red-tailed hawks, cedar waxwings, mourning doves, an occasional robin flock. Looking and listening for these and other species make winter birding days especially exhilarating.

Where should you look for the best birding at any season of the year? Birds may be anywhere in the trees, thickets, or shrubbery, and around any body of water, especially flowing streams and shallow puddles. There are certain favored places in the Garden where the greatest variety may be found. Among these are the small pool and the shrubbery west of the Climatron, the Knolls with its small stream, the various holly trees just west of the Knolls, the Mausoleum and the trees and shrubbery around it, the Lehmann rose garden and the nearby row of paper birch trees, the entire path through and around the North American tract with its good variety of deciduous trees, its lake, and its thicket just west of the new Lehmann Building. This thicket is interlaced with good paths and is a favorite stop-over spot for migrating warblers, kinglets and vireos. Here you can develop a fine case of "warbler neck", a welcome muscular malady that strikes a birder in the spring and fall! In the winter this thicket and other shrubby areas are especially good cover for the bob-whites and wintering sparrows, grackles and slate-colored juncos. Winter investigation should also be made of all the Garden's fine seed and cone-bearing trees and plants.

A composite list of over 125 species, some quite unusual, has been made for the Garden during the last three years, by four different birders: Dr. John Mullins, who has birded in the Garden since his childhood; Miss Helen Bowman, a retired teacher and Tower Grove House volunteer; Mr. Tony McColl, an Audubon Society bird walk leader; and me. For people interested in further investigation of the Garden and our area's other birding possibilities, A Guide to Finding Birds in the St. Louis Area by Richard Anderson and Paul Bauer, is an excellent publication and is available at the Garden Gate Shop for \$1.10.



St. Louis Audubon Society Bald Eagle Count - Saturday, February 17, 1973, meet at Clarksville, Missouri.

DETAILS IN A LATER BULLETIN.



1972 BLUEBIRD NESTING BOX STUDY

Burrell Pickering

The results of this fifth year of the Bluebird Nesting Box Trails at Sunny Ranch in Warren County, Missouri, were excellent - 299 young bluebirds successfully left the nest. For eighteen week-ends during this past breeding season, a group from the Webster Groves Nature Study Society walked the trails, checked each of the 60 boxes and recorded their findings as to: if occupied, kind of bird, number of eggs, number of young, number fledged. Also the behavior pattern of the bluebirds was noted as well as any unusual observations. Because of the birds' need for breeding territory, it is necessary to place the nest boxes about five hundred feet apart, which made each of the three trails of twenty boxes about two miles long, and required about two hours to check a trail.

When the first check of boxes was made on April 10th, the bluebird nesting cycle was well progressed with the report showing 26 nests, 129 eggs and 5 young. Highlights of the season were: May 27th, 155 eggs; June 17, 42 boxes occupied; during the week ending July 1st, 104 birds left the nest. Two nests had 5 white eggs each but hatched "blue" birds. One nest had a field mouse with 9 young and another box was used by a flying squirrel who moved her young after an inspection. Two boxes fledged 11 Black-capped Chickadees.

The Statistical Analysis gives some interesting information on the success of the project. However, it was disappointing that 90 eggs did not hatch and produce young, and that the average fledged per nest of 2.3 was below the last two years'. This occurred during the second and possibly third brooding, the first brooding being quite successful. We attribute this in part to the severe drought we had in this area this past summer with only a few light showers in a ten week period. Our lake dropped almost three feet; many large cracks opened in the ground; all of the creeks were dry and even the wild blackberries, very abundant in the spring, dried up on the bushes. Also there were many days of very hot weather which may have made incubation uncomfortable and difficult. All of this greatly affected wildlife. As to the eggs that disappeared, it is not likely that many were removed by predators since the wood posts had a wide band of sheet metal around them and many of the posts were metal. We do believe that any broken eggs and probably some of the dormant eggs were removed from the nests by the adult birds as part of their housekeeping activity.

Some interesting observations made by the weekly observers and a study of the data sheets were: NEST BUILDING- The time required to build a nest was usually 5 or 6 days but during the height of the breeding season, one week-end the box would be empty and the following week-end it would have a nest with several eggs in it. Both the male and female took part in nest building activity but usually it was the female that did most of the work. The nests were loose poorly built structures, but in the snug cavity of the boxes expert workmanship is not required. The nests were made almost entirely of dried grasses and weed stems with the lining of fine grasses; EGG LAYING- started promptly after the nest was completed and the usual number of eggs was 4 or 5, occasionally 6. The eggs are ovate and a pale blue with two instances of white eggs which is a rarity; INCUBATION- This started as soon as the last egg was laid and required about 14 days. Several observers mentioned that during incubation the female refused to leave the nest when the box was opened; YOUNG- The young grew rapidly and were fully feathered and ready to leave the nest in about 15 days. They were able to fly a short distance on the first try to some low tree branch and none were ever found on the ground. FEEDING- Both parents fed the young every few minutes from dawn to dusk and the food consisted entirely of insects. The young were still fed for a while after leaving the nests, usually by the male while the female continued with her next nest brood. HOUSEKEEPING- A fine quality of these delightful birds is their cleanliness and good housekeeping. The nests are kept

clean and as soon as the eggs hatch, the shells are carried some distance away. Likewise the droppings of the young were quickly removed from the nest box. **FOOD HABITS-** In its food habits, the bluebird is one of our most useful birds. It does little harm to human interests, feeding almost entirely on insects and thereby destroying large quantities of harmful insects. The vegetable portion of their diet is largely fleshy fruit mostly of the wild variety with holly, blueberry, flowering dogwood, Virginia creeper, hackberry, sumac, pokeweed, and red cedar berries carrying them through the winter in our area. Unfortunately they don't eat seeds and we have never seen a bluebird at one of our several feeders.

Some general comments are: While the bluebirds are gentle and lovable, they can be aggressive. A few times they dive bombed observers who were examining the nest with young and although they did not strike, they came very near it. Fortunately we have no loss of young due to the infestation of the nest by the larvae of the parasitic blowfly (*Apaulina sialia*) which so many writers give as the cause of mortality of young birds. Before the nesting season and after the first nests were removed, a tablespoon of powdered sulphur had been put in each box which was probably a blood control measure. The bluebirds are friendly and trusting and we have never had a nest deserted because of opening the boxes for inspection. The records show the bluebirds raise two broods a year and in some cases three. However, since they are not banded, it is difficult to authenticate the third brood. It would be interesting and informative if someone having a banding permit would band the females some breeding season. House sparrows continued to be a major problem as the statistics showed. However, with the weekly removal of nests and eggs, no additional sparrows were raised to further harass the bluebirds for nesting sites.

The bluebird has been the Official Bird of the State of Missouri since March 30, 1927. At Sunny Ranch there are bluebirds the year round, many staying through the winter in the large cedar groves for shelter and eating the berries for food. They are most welcome additions to our wildlife.

Statistical analysis of the 18 weekly data sheets for all trails shows:

Nest Boxes

Available -----	60
Used by some species -----	56
Bluebirds used for first brood ---	50
Bluebirds used for second brood --	37

Young - Bluebirds

Died in nest -----	4
Lost to predators -----	0
Fledged - Successfully left nest-	299

Eggs - Bluebirds

Total laid -----	393
Average per clutch --	4.5
Infertile or deserted	65
Disappeared from nest	25
Young hatched -----	303

House Sparrows

Nests removed -----	41
Eggs removed -----	102
Boxes used all season	2
Boxes used part of season -----	12

<u>Bluebird Yearly Comparison Data</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>
Boxes available	20	36	40	58	60
Boxes used for nests	16	24	28	36	50
Total nests	23	34	46	55	87
Eggs laid	98	150	212	248	393
Eggs per nest	4.2	4.4	4.6	4.5	4.5
Young fledged	62	79	137	195	299
Percentage of success	63	53	65	79	76
Average per nest	2.7	2.3	3.0	3.5	2.3
(Chickadees fledged	0	8	0	11	9

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BOARD ACTION

At the regular meeting of the St. Louis Audubon Board on October 17 1972, the following resolutions were adopted:

That the Missouri Conservation Commission be urged to develop a sound comprehensive policy on the use of traps in Missouri. Regulations be developed and enforced which will minimize the danger to domestic animals and "non-target" wildlife, reduce the suffering of trapped animals and carefully consider the humane elements associated with the use of steel traps while keeping in mind all related aspects of environmental management and wildlife protection.

1. That the Society shall represent to the Regional Forum, East-West Gateway Coordinating Council, that areawide planning for the St. Louis Region should be based on the capabilities of the natural systems of the Region, and
2. Until such time as the Region's natural resources and their characteristics have been intensively investigated and inventoried, that the Regional Forum be respectfully requested urge the East-West Gateway Coordinating Council to adapt a firm policy that flood plains shall not be further developed, and applications for such development be denied.



EARL'S PEARLS OR TAKE COMFORT

Although I realize the way to a reader's heart is NOT through puns, I can't resist the following nonsense which came to mind during a lull in bird activity on a solo walk. A surprising number of references to birds, voluntary or otherwise, enter our everyday conversation. Some of the following tidbits are unadulterated puns. If you are allergic to them, take two aspirins. For the answers, if any, consult a bird book or birder.

If one good tern deserves another, why does it take a tern for the worse? Are all right terns good terns and is a left tern abandoned? Is a tern's stone used to kill two birds? Where did the tern get stoned? (I'll omit that old unoriginal one about leaving no tern unstoned.)

If the goose hangs high will her mate gander at her and will this gander make a goose of himself? What could be wilder than a gander on a wild goose chase? If a red bird entices another's mate, is it a cardinal sin? How can we prevent a nest egg from becoming chicken feed? Does a crow have caws to crow and will his mate develop crow's feet from too much Old Crow? When forced to eat crow, does Old Crow help? Are birds the things on the wing or wings the things on the bird?

calendar



There are birding trips each Wednesday and Thursday sponsored by the Webster Groves Naure Study Society. For information on the Wednesday trips call Sallie Phillips 821-2216. For the Thursday trips call Eleanor Marcus, 227-1290.

SATURDAY NOVEMBER 18 and SUNDAY NOVEMBER 26, 8:00 A.M. Audubon Nature Walk at Shaws Garden Arboretum, Gray Summit Mo. Meet at Main Gate. Also on December 16 and 31.

SATURDAY, NOVEMBER 25, 8:30 A.M.- St. Charles County Mississippi River Birding. Meet at Alton Dam parking lot, Missouri side.

WEDNESDAY, DECEMBER 6, 7:30 P.M., St. Louis University Environmental film series, "Glen Canyon" and "West Chicagof". Pope Pius XII Library, Knight's Room.

FRIDAY, DECEMBER 8, 8:15 P.M. - ST. LOUIS AUDUBON SOCIETY WILDLIFE FILM - "Beavers, Water and Wildlife". Earl Hilfiker shows us not only remarkable shots of beavers but also the variety of bird and animal life that uses the pond. At the St. Louis Ethical Society, 9001 Clayton Road.

SUNDAY, DECEMBER 17, 8:00 A.M. WGNSS Christmas count at Busch wildlife Sanctuary. See notice in bulletin.

SATURDAY, DECEMBER 30, 8:00 A.M. - Audubon Christmas count in St. Charles County. See notice in bulletin.

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